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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,728	03/16/2004	Minghua Fu	TEPS-0034	1855
27964	7590	10/12/2006	EXAMINER	
HITT GAINES P.C. P.O. BOX 832570 RICHARDSON, TX 75083			NGUYEN, VINCENT Q	
			ART UNIT	PAPER NUMBER
			2858	

DATE MAILED: 10/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/801,728

Applicant(s)

FU ET AL.

Examiner

Vincent Q. Nguyen

Art Unit

2858

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 1, lines 4, 7 and 11, the claim recites the phrase: "at least two corresponding line voltages" (e.g. line 4) for the first corresponding line voltage (Examiner assumes that Applicant wanted to recite the line voltage V_{ab} , figure 3). In line 7, the claim also recites the phrase: "at least two corresponding line voltage" for the second corresponding line voltage (Examiner assumes the line voltage V_{ac}). Because the line voltages V_{ab} and V_{ac} cannot share the same lines, the phrase "at least two corresponding line voltages" is incorrect for the second corresponding line voltage.

The same rejections are applied for claim 8 and 15.

Claims 2-7, 9-14 and 16-21 are rejected as being dependent upon the rejected claims 1, 8 and 15.

For the purpose of examination, examiner assumes the claim recites "at least other two corresponding line voltage) in line 7 to differentiate the lines.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 5, 7-10, 12, 14-17, 19, 21 are rejected under 35 U.S.C. 102(b) as being anticipated by De Mesmaeker (4,249,124).

With respect to claims 1-3, 5, 7-10, 12, 14-17, 19, 21, De Mesmaeker discloses a phase voltage circuit, comprising a line voltage stage (Figure 6), coupled to at least three input voltage lines (T, S, R), configured to provide at least two corresponding line voltages, wherein a first corresponding line voltage (UMT) of said at least two corresponding line voltages (T,S) is a function of a comparison between a first input voltage line and a second input voltage line of said at least three input voltage lines (T,S,R), and a second corresponding line voltage (UMS) of said at least “other” (See 112 rejection above) two corresponding line voltage (S, R) is a function of a comparison between said first input voltage line and a third input voltage line of said at least three input voltage lines (T,S,R); and a difference voltage stage (D₁, D₂), coupled to said line voltage stage, configured to provide at least one phase voltage, wherein each at least one phase voltage is derived from said at least two corresponding line voltages (Col. 7, lines 44-46).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4, 6, 11, 13, 18, are rejected under 35 U.S.C. 103(a) as being unpatentable over De Mesmaeker (4,249,124).

With respect to claims 4, 6, 11, 13, 18, De Mesmaeker discloses a first (D1) of said two differential amplifiers (D1, D2) provides a first line voltage (V_{TS}) by subtracting a second input voltage (Connect to element S2) from a first input voltage.

De Mesmaeker does not disclose a second of said two differential amplifiers provides a second line voltage by subtracting said first input voltage from a third input voltage.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the difference amplifiers provides a second line voltage by subtracting said first input voltage from a third input voltage because De Mesmaeker teaches deriving the phase voltage from the line voltage (De Mesmaeker's col. 7, lines 44-46), the De Mesmaeker's element must perform the same operation as recited in the claim (i.e. subtracting the first input voltage from a third input voltage) (See MPEP 2183).

Allowable Subject Matter

7. Claim 20 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

8. Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

Prior Art

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Patent No. 4,366,521 (Jessee) discloses three-phase system having line-to-line voltages that are generated by connecting the line voltages in pairs to the differential inputs of two additional operational amplifiers. The output of one such additional operational amplifier is applied to the first end of the potentiometer and the output of the other is applied to the input of the operational amplifier in the phase shifting circuit to determine symmetrical components of the three-phase power system.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

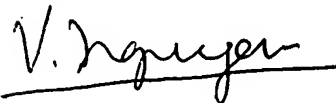
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vincent Q. Nguyen whose telephone number is (571) 272-2234. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Vincent Q. Nguyen
Primary Examiner
Art Unit 2858

October 6, 2006